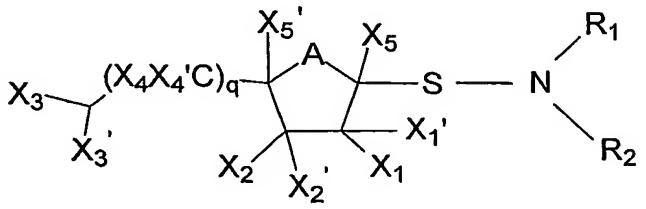
Claims:

1. A compound of general formula (I):



wherein A is selected from the group consisting of O, S, SO, SO_2, Se, Te, NR_8, $CR_9R'_9$, N → O and C(O);

and, when A is O and q is 1, one of R_1 and R_2 is selected from the group consisting of hydrogen, optionally substituted C_{1-3} or $>C_{30}$ alkyl, alkyl when interrupted by one or more heteroatoms or functional groups selected from the group consisting of O, S, -N=, NR_7 and $-(Y)_mC=(Z)(T)_n-$, optionally substituted C_{2-3} or $>C_{30}$ alkenyl, alkenyl when interrupted by one or more heteroatoms or functional groups selected from the group consisting of O, S, -N=, NR_7 and $-(Y)_mC=(Z)(T)_n-$, optionally substituted aralkyl which may be interrupted within the alkyl moiety by one or more heteroatoms or functional groups selected from the group consisting of O, S, -N=, NR_7 and $-(Y)_mC=(Z)(T)_n-$, optionally substituted acyl, optionally substituted aryl, optionally substituted heterocyclic and a carbohydrate moiety, while the other of R_1 and R_2 is selected from the group consisting of hydrogen, optionally substituted alkyl which may be interrupted by one or more heteroatoms or functional groups selected from the group consisting of O, S, -N=, NR_7 and $-(Y)_mC=(Z)(T)_n-$, optionally substituted alkenyl which may be interrupted by one or more heteroatoms or functional groups selected from the group consisting of O, S, -N=, NR_7 and $-(Y)_mC=(Z)(T)_n-$, optionally substituted aralkyl which may be interrupted within the alkyl moiety by one or more heteroatoms or functional groups selected from the group consisting of O, S, -N=, NR_7 and $-(Y)_mC=(Z)(T)_n-$, optionally substituted

aryl, optionally substituted heterocyclic, optionally substituted acyl and a carbohydrate moiety;

but, when A is S, SO, SO_2, Se, Te, NR_8, CR_9R_9', N $\rightarrow$ O or C(O) and q is 1 or A is O, S, SO, SO_2, Se, Te, NR_8, CR_9R_9', N $\rightarrow$ O or C(O) and q is O, then R_1 and R_2 are independently selected from the group consisting of hydrogen, optionally substituted alkyl which may be interrupted by one or more heteroatoms or functional groups selected from the group consisting of O, S, -N=, NR_7 and $-(Y)_mC=(Z)(T)_n-$, optionally substituted alkenyl which may be interrupted by one or more heteroatoms or functional groups selected from the group consisting of O, S, -N=, NR_7 and $-(Y)_mC=(Z)(T)_n-$, optionally substituted aralkyl which may be interrupted within the alkyl moiety by one or more heteroatoms or functional groups selected from the group consisting of O, S, -N=, NR_7 and $-(Y)_mC=(Z)(T)_n-$, optionally substituted aryl, optionally substituted acyl and a carbohydrate moiety, or R_1 and R_2 together with the nitrogen atom from which they depend form a saturated or unsaturated, optionally substituted heterocyclic group which may include additional heteroatoms selected from the group consisting of O, N and S;

X_1 is selected from the group consisting of OR_3, SR_3, $NR_3R'_3$, hydrogen, halogen, $-(Y)_mC=(Z)(T)_nR_3$, $-N(C=(Z)(T)_nR_3)_2$, N_3, CN, OCN, SCN, OSO_3R_3, OSO_2R_3, $OPO_3R_3R'_3$, $OPO_2R_3R'_3$, $S(O)R_3$, $S(O)_2R_3$, $S(O)_2OR_3$, $PO_3R_3R'_3$, $NR_3NR'_3R''_3$, $SNR_3R'_3$, $NR_3SR'_3$, SSR_3 and R_3, or is an oxo group, =S, $=NOR_3$ or $=CR_3R'_3$ and X_1' is absent;

X_2 is selected from the group consisting of OR_4, SR_4, $NR_4R'_4$, hydrogen, halogen, $-(Y)_mC=(Z)(T)_nR_4$, $-N(C=(Z)(T)_nR_4)_2$, N_3, CN, OCN, SCN, OSO_3R_4, OSO_2R_4, $OPO_3R_4R'_4$, $OPO_2R_4R'_4$, $S(O)R_4$, $S(O)_2R_4$, $S(O)_2OR_4$, $PO_3R_4R'_4$, $NR_4NR'_4R''_4$, $SNR_4R'_4$, $NR_4SR'_4$, SSR_4 and R_4, or is an oxo group, =S, $=NOR_4$ or $=CR_4R'_4$ and X_2' is absent;

X_3 and X_3' are independently selected from the group consisting of OR_5, SR_5, $NR_5R'_5$, hydrogen, halogen, -

$(Y)_mC=(Z)(T)_nR_5$, $-N(C=(Z)(T)_nR_5)_2$, N_3, CN, OCN, SCN, OSO_3R_5, OSO_2R_5, $OPO_3R_5R'_5$, $OPO_2R_5R'_5$, $S(O)R_5$, $S(O)_2R_5$, $S(O)_2OR_5$, $PO_3R_5R'_5$, $NR_5NR'_5R''_5$, $SNR_5R'_5$, $NR_5SR'_5$, SSR_5 and R_5, or X_3 is =O, =S, $=NOR_5$ or $=CR_5R'_5$ and X_3' is absent;

X_4 is selected from the group consisting of OR_6, SR_6, $NR_6R'_6$, hydrogen, halogen, $-(Y)_mC=(Z)(T)_nR_6$, $-N(C=(Z)(T)_nR_6)_2$, N_3, CN, OCN, SCN, OSO_3R_6, OSO_2R_6, $OPO_3R_6R'_6$, $OPO_2R_6R'_6$, $S(O)R_6$, $S(O)_2R_6$, $S(O)_2OR_6$, $PO_3R_6R'_6$, $NR_6NR'_6R''_6$, $SNR_6R'_6$, $NR_6SR'_6$, SSR_6 and R_6, or is an oxo group, =S, $=NOR_6$ or $=CR_6R'_6$ and X_4' is absent;

X_5 is selected from the group consisting of hydrogen, CN, $-C=(Z)(T)_nR_{11}$, $S(O)R_{11}$, $S(O)_2R_{11}$, $S(O)_2OR_{11}$, $PO_3R_{11}R'_{11}$, optionally substituted alkyl, optionally substituted alkaryl, optionally substituted aryl, optionally substituted aralkyl, and optionally substituted acyl;

X_1', X_2', X_4' and X_5' are the same or different and are selected from the group consisting of hydrogen, CN, optionally substituted alkyl, optionally substituted alkaryl, optionally substituted aryl, optionally substituted aralkyl, and optionally substituted acyl;

or one of X_1 and X_2, X_2 and X_5', X_5' and A when A contains a carbon or nitrogen atom, X_5 and A when A contains a carbon or nitrogen atom, and X_5 and X_1 together constitute a double bond, or X_5' and X_4 or X_3 and X_4 together constitute a double bond, or R_1 and X_1, R_2 and X_1, R_1 and X_2, R_2 and X_2, R_1 and X_5, R_2 and X_5, R_1 and X_5', R_2 and X_5', X_1 and X_2, X_2 and X_3, X_2 and X_4, X_3 and X_4, X_1 and X_1', X_2 and X_2', X_3 and X_3' or X_4 and X_4' together form part of a ring structure which optionally includes at least one heteroatom selected from O, S and N and is optionally substituted;

m, n and q are independently 0 or 1 and Y, Z and T are independently selected from the group consisting of O, S, and NR_{10};

R_3, R'_3, R''_3, R_4, R'_4, R''_4, R_5, R'_5, R''_5, R_6, R'_6, R''_6, R_7, R_8, R_9, R'_9, R_{10}, R_{11} and R'_{11} are the same or

different and are selected from the group consisting of hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted acyl and a carbohydrate moiety;

with the proviso that at least two of X_1, X_2, X_3 and X_4 are other than hydrogen or a group linked to the ring through a carbon-carbon bond and the further proviso that the compound of general formula (I) is not 1-(9H-purinyl)-*S*-(3-deoxy-pentafuranosyl)sulfenamide 5-formamido-2',3',5'-tri-*O*-formyl-1-(β-D-ribofuranosylthio)imidazole-4-carboxamide, *N*-phenyl-*S*-(2,3:5,6-di-*O*-isopropylidenyl-β-D-mannofuranosyl)sulfenamide or *N*,*N*-diethyl-*S*-(2,3,5,6-tetra-*O*-benzoyl-β-D-galactofuranosyl)sulfenamide;

or a pharmaceutically acceptable salt thereof.

2. A compound as claimed in claim 1 wherein q is 0 or q is 1 and A is selected from S, SO, SO_2, Se, Te, NR_8, $CR_9R'_9$, N → O or C(O) and one or both of R_1 and R_2 is alkyl.

3. A compound as claimed in claim 2 wherein one or both of R_1 and R_2 is C_{4-30} alkyl.

4. A compound as claimed in claim 3 wherein one or both of R_1 and R_2 is C_{6-12} alkyl.

5. A compound as claimed in claim 4 wherein one or both of R_1 and R_2 is C_{8-10} alkyl.

6. A compound as claimed in claim 1 wherein one or both or R_1 and R_2 is aralkyl.

7. A compound as claimed in claim 6 wherein one or both R_1 and R_2 is $(CH_2)_rPh$ where Ph is phenyl and r is an integer in the range 1 to 12 inclusive.

8. A compound as claimed in claim 1 wherein one or both of R_1 and R_2 is alkyl interrupted by one or more heteroatoms or functional groups selected from the group consisting of O, S, -N=, NR_7, and $-(Y)_mC=(Z)(T)_n$.

9. A compound as claimed in claim 8 wherein one or

both of R_1 and R_2 is alkyl interrupted by one or more oxygen atoms.

10. A compound as claimed in claim 9 wherein one or both of R_1 and R_2 is $CH_3(CH_2)_xO(CH_2)_yO(CH_2)_z$ wherein x is an integer in the range 0 to 12 inclusive and y and z are independently integers in the range 1 to 12 inclusive.

11. A compound as claimed in claim 1 wherein q is 0 or q is 1 and A is selected from S, SO, SO_2, Se, Te, NR_8, $CR_9R'_9$, N → O or C(O) and one or both of R_1 and R_2 is alkenyl.

12. A compound as claimed in claim 1 wherein R_1 and R_2 together with the nitrogen atom from which they depend form an optionally substituted saturated or unsaturated heterocyclic group.

13. A compound as claimed in claim 12 wherein R_1 and R_2 together with the nitrogen atom from which they depend form a cyclic imide or a lactam.

14. A compound as claimed in any one of claims 1 to 13 wherein X_1 is OR_3.

15. A compound as claimed in claim 14 wherein R_3 is hydrogen or optionally substituted acyl.

16. A compound as claimed in any one of claims 1 to 15 wherein X_2 is OR_4.

17. A compound as claimed in claim 16 wherein R_4 is hydrogen or optionally substituted acyl.

18. A compound as claimed in any one of claims 1 to 17 wherein X_3 is OR_5.

19. A compound as claimed in claim 18 wherein R_5 is hydrogen or optionally substituted acyl.

20. A compound as claimed in any one of claims 1 to 19 wherein X_4, when present, is OR_6.

21. A compound as claimed in claim 20 wherein R_6 is hydrogen or optionally substituted acyl.

22. A compound selected from the group consisting of:

N-benzyl-*S*-(2,3,5,6-tetra-*O*-benzoyl-β-D-galactofuranosyl)sulfenamide

N,N-dibenzyl-*S*-(2,3,5,6-tetra-*O*-acetyl-β-D-galactofuranosyl) sulfenamide

N,N-dicyclohexyl-*S*-(2,3,5,6-tetra-*O*-acetyl-β-D-galactofuranosyl) sulfenamide

N,N-di(2-methoxyethoxyethyl)-*S*-(2,3,5,6-tetra-*O*-acetyl-β-D-galactofuranosyl) sulfenamide

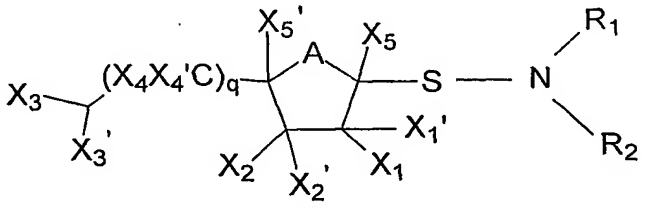
1-(2,2,6,6-tetramethylpiperidinyl)-*S*-(2,3,5,6-tetra-*O*-acetyl-β-D-galactofuranosyl) sulfenamide

N,N-dioctyl-*S*-(2,3-di-*O*-acetyl-5-O-[*tert*-butyldiphenylsilyl]-α-D-arabinofuranosyl) sulfenamide

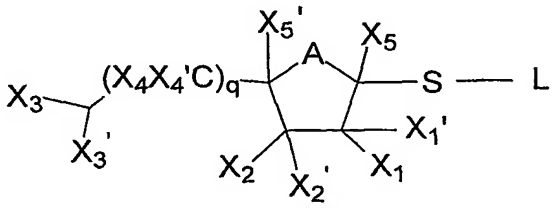
N,N-Dibenzyl-*S*-(β-D-galactofuranosyl) sulfenamide

N,N-Di(2-methoxyethoxyethyl)-*S*-(β-D-galactofuranosyl) sulfenamide

23. A method of preparation of a compound of general formula (I):

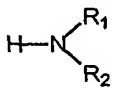


comprising reacting a compound of general formula (II):



wherein L is a leaving group, preferably acetyl and X_1, X_1', X_2, X_2', X_3, X_3', X_4, X_4', X_5 and X_5', are as defined;

with a compound of general formula (III):



wherein R_1 and R_2 are as defined above;

in the presence of a bis-activated alkyl halide.

24. A method for the treatment of a microbial infection, comprising administering to a patient in need of such treatment a therapeutically effective amount of a compound of general formula (I) as claimed in any one of claims 1 to 22.

25. The use of a compound of general formula (I) as claimed in any one of claims 1 to 22 in the manufacture of a medicament for use in the treatment of a microbial infection.

26. A pharmaceutical composition comprising a compound of general formula (I) as claimed in any one of claims 1 to 22 and a pharmaceutically acceptable carrier.

27. A method of killing a microorganism, comprising exposing said microorganism to a compound of general formula (I) as claimed in any one of claims 1 to 22.